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(21) International Application Number: PCT/IE99/00001 (22) International Filing Date: 14 January 1999 (14.01.99) (30) Priority Data: 980028 16 January 1998 (16.01.98) IE 60/095,458 6 August 1998 (06.08.98) US (71) Applicants (for all designated States except US): LOCTITE (R & D) LIMITED [IE/IE]; Tallaght Business Park, Whitestown, Tallaght, Dublin 24 (IE). LOCTITE CORPORATION [US/US]; Hartford Square North, 10 Columbus Boulevard, Hartford, CT 06106-5108 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): BURNS, Barry [IE/IE]; 60 Lower Mountpleasant Avenue, Rathmines, Dublin 6 (IE). WOOLFSON, Harry [IE/IE]; 55 Sandford Road, Ranelagh, Dublin 6 (IE). MALONE, Paul [IE/IE]; 14 Mount Alton, Knocklyon, Dublin 16 (IE). WIGHAM, Jonathan [IE/IE]; 46 Glenbrook Park, Rathfarnham, Dublin 14 (IE). (74) Agents: GATES, Marie, Christina, Esther et al.; Tomkins & Co., 5 Darnmouth Road, Dublin 6 (IE).		(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: CURABLE EPOXY-BASED COMPOSITIONS (57) Abstract <p>This invention relates to curable epoxy-based compositions for use in the field of microelectronics, such as those having an epoxy compound which has two or more epoxy groups per molecule optionally a polythiol compound which has two or more thiol groups per molecule, a latent hardener, and at least one solid organic acid which is substantially insoluble in a mixture of the foregoing components at room temperature. The solid organic acid may be selected from the group consisting of: aliphatic, cycloaliphatic and aromatic carboxylic acids and derivatives thereof, aliphatic, cycloaliphatic, and aromatic quinones and derivatives thereof, phenols and derivatives thereof and enolisable aliphatic, cycloaliphatic and aromatic compounds and derivatives thereof. The solid organic acid should have a pKa of less than or equal to about 12.0, desirably less than or equal to about 10, and often less than or equal to about 9.0, such as less than or equal to about 7.5. The invention also relates to curable epoxy-based compositions including an epoxy compound, a thixotropy-conferring component, a latent hardener and at least one of the solid organic acids above demonstrating improved rheological properties such as yield point maintenance and viscosity maintenance over time.</p>		